HALEY & ALDRICH

BOEING REALTY CORPORATION
FORMER C-6 FACILITY
LOS ANGELES, CALIFORNIA

TECHNICAL MEMORANDUM
Quarterly Report No. 2
First Quarter 2002
Extended Soil Vapor Extraction Pilot Testing

To: **Mr. Brian Mossman**
Boeing Realty Corporation
3855 Lakewood Blvd.
Building 1A MC D001-0097
Long Beach, CA 90846

From: **Haley & Aldrich, Inc.**

Date: **April 25, 2002**

Re: **Quarterly Report No. 2, First Quarter 2002, Extended Soil Vapor Extraction Pilot Testing, Boeing Realty Corporation, Former C-6 Facility – Parcel C, Los Angeles, California**

Haley & Aldrich, Inc. has prepared this report to summarize extended soil vapor extraction (SVE) pilot test activities conducted at the former Boeing C-6 Facility (subject property), in Los Angeles, California. During the period of January 3, 2002 through March 30, 2002, extended pilot tests were operated in the following areas:

- Former Building 1/36
- Former Building 2

This memorandum summarizes system operations, field measurements, vapor sampling and analysis, mass removal, extraction well optimization, and planned future SVE operations.

BACKGROUND

Laboratory results for soil samples collected in the former Building 1/36 and Building 2 areas at the subject property indicated the presence of volatile organic compounds (VOCs) at depth requiring remediation to prevent possible impact to groundwater. Based on the results of the investigation, shallow occurrences of impacted soil (less than 12 feet below ground surface) were excavated and disposed of at an approved facility. SVE was recommended for the remediation of deep impacted soil. Haley & Aldrich was contracted by BRC to install and operate two extended SVE pilot tests to obtain data for the evaluation of using SVE as a full-scale remedy. Workplans for the pilot test activities in the Building 1/36 and Building 2 areas were submitted and

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3760 Kilroy Airport Way, Suite 500
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25 April 2002
C6-BRC-T-02-008

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
Los Angeles Region
320 W. 4th Street, Suite 200
Los Angeles, CA 90013

BOEING

Attention: John Geroch

Subject: **QUARTERLY REPORT NO. 2, FIRST QUARTER 2002, EXTENDED SOIL VAPOR EXTRACTION PILOT TESTING, FOR BOEING REALTY CORPORATION, FORMER C-6 FACILITY, 19503 SOUTH NORMANDIE AVENUE, LOS ANGELES, CA**

Dear Mr. Geroch:

Please find enclosed for your review, a copy of the subject document prepared by Haley & Aldrich for Boeing Realty Corporation.

If you have any questions concerning this document, please contact the undersigned at 562-593-8623.

Sincerely,

Stephanie Sibbett

Stephanie Sibbett
Boeing Realty Corporation

Cc: Mario Stavale, Boeing Realty Corporation

enclosure

approved by the Regional Water Quality Control Board, Los Angeles Region (LARWQCB) in May and September, 2001, respectively.

BUILDING 1/36

The Building 1/36 extended pilot test system initially consisted of six 2-inch diameter, dual-completion, SVE wells, a trailer-mounted, 250-standard cubic feet per minute (scfm) blower system, two 8,000-lb granular activated carbon (GAC) vapor control vessels (primary and secondary), and associated piping. Haley & Aldrich installed the initial pilot test wells in June 2001 and began system operation on July 2, 2001. The location of the Building 1/36 pilot test is shown in Figure 1. Site grading began in October 2001 in the vicinity of the SVE system therefore all of the initial wells were abandoned. At the end of November, one well (1-VEW-24A and B) was re-installed and the system once again began operation. An additional forty-one dual and single completion wells (1-VEW-1 through 1-VEW-26) were installed during the month of January 2002 as part of an SVE system scale-up. The well field layout, including well screen depths is shown on Figure 2. These wells are scheduled to start operation in April 2002.

Operations for the first quarter 2002 covered the period January 1, 2002 to March 30, 2002. During this period, the system operated with an up-time efficiency of 86% and removed a total of approximately 3,013 lbs. of VOCs. Three GAC changeouts, 8,000 lbs. each, were completed during this period on February 6, February 27, and March 8, 2002. The pilot test system was shut down on March 29, 2002 and removed from the site for the installation of the larger 1,000 cubic feet per minute (cfm) system. Start up for this system is anticipated in April 2002.

FIRST QUARTER 2002 SVE OPERATION SUMMARY – BUILDING 1/36

Days of Operations	75
Available Days of Operation	87
Operational Time (%)	86
Mass Removed during Period (lbs)	3,013
Cumulative Mass Removed (lbs)	4,993

OPERATIONS INFORMATION – BUILDING 1/36

Operational data and VOC mass removal for the extended SVE pilot test system are tabulated and shown graphically in Attachment 1. The system operation timeline for the period is as follows:

- January 31, 2002 — System shut down due to carbon breakthrough
- February 6, 2002 — One GAC vessel was changed out (8,000 lbs.), system restarted
- February 21, 2002 — System shut down due to GAC breakthrough
- February 27, 2002 — One GAC vessel was changed out (8,000 lbs.), system restarted
- March 8, 2002 — System shutdown, one GAC vessel was changed out (8,000 lbs.), system restarted
- March 29, 2002 — GAC breakthrough , system shutdown and removed, began Installation of full-scale equipment

Total days of operation for this period was approximately 75 with intermittent downtime due to GAC changeout. This equates to an up-time of approximately 86 percent when compared with the days available

for operation as shown in Attachment 1, Graph 1.

During the period from January 3, 2002 through March 29, 2002, VOC vapors were drawn individually from wells VEW-24A and VEW-24B with valves 100 percent open at the wellheads. The diluted process flowrates ranged from approximately 163 to 200 scfm. Extraction vapor dilution was required for air permit compliance due to high VOC concentrations being extracted from wells 1-VEW-24A and B. Inlet vacuums ranged from 13 to 20 inches of water column (inches H_2O).

For this reporting period, approximately 3,013 lbs. of VOCs were extracted from the SVE wells and treated with GAC during 1,806 hours of operation a shown in Attachment 1, Graph 2. Since July 2, 2001 approximately 4,993 lbs. of VOCs have been extracted during approximately 3,370 hours of operation. Operation of the extended SVE pilot test system is in compliance with the multiple-locations permit from the South Coast Air Quality Management District (SCAQMD).

FIELD MEASUREMENTS - BUILDING 1/36

VOC concentrations were measured with a photo-ionization detector (PID), calibrated to 100 parts per million by volume (ppmv) hexane, at the undiluted inlet, diluted inlet, between the GAC vessels, and at the exhaust stack. Flowrates were measured with a hand-held TSI Veloci-clac Plus hot-wire anemometer or by measuring the pressure differential across an orifice plate. Additional measurements were collected during operation including vacuum readings at each extraction well and vapor probe, pressures at the GAC vessels, and blower exhaust temperature. The field influent VOC concentration measurements are plotted in Attachment 1, Graph 3.

VAPOR SAMPLING AND ANALYSIS- BUILDING 1/36

For this period, seven pairs of vapor samples were collected in Tedlar bags from the diluted process air stream (inlet to primary GAC vessel and exhaust from the secondary GAC vessel) and delivered to a state-certified laboratory for analysis. These samples were collected for SCAQMD permit compliance as well as system performance evaluation. The vapor samples were collected using a Tedlar bag in a vacuum case. Laboratory analyses were conducted on vapor grab samples using EPA Method 8260B/TO-14A. The full results of the vapor sampling are summarized in Attachment 1, Tables 1, 2, and 3.

Based on the results of the laboratory analysis of vapor grab samples, maximum diluted inlet VOC concentrations as parts per billion by volume (ppbv) for the period are as follows:

• 1,1,1 Trichloroethane (1,1,1 TCA)	220,000 ppbv
• Toluene	210,000 ppbv
• 1,1 Dichloroethene (1,1 DCE)	140,000 ppbv
• Trichloroethene (TCE)	61,000 ppbv
• 1,1 Dichloroethane (1,1 DCA)	5,700 ppbv
• Xylene	5,000 ppbv
• Cis-1,2 Dichloroethene (Cis-1,2 DCE)	2,800 ppbv
• Methylene chloride	2,500 ppbv
• Tetrachloroethene (PCE)	1,600 ppbv
• 1,2 Dichloroethane (1,2-DCA)	560 ppbv
• Trichlorofluoromethane	130 ppbv

Reported influent concentrations varied during the period due to the effects of different operational

configurations used during pilot testing. All exhaust sample analyses reported VOC concentrations within the permit limitations.

EXTRACTION WELL OPTIMIZATION - BUILDING 1/36

Wells 1-VEW-24A and B operated in compliance with permit guidelines during the first quarter of 2002. Concentrations measured at the well heads frequently exceeded 9,999 ppmv with the well head completely open. Based on the available data, wells 1-VEW-24A and B operated at optimized conditions extracting the maximum concentrations at the maximum allowable flowrates. Further well optimization will be performed once VOC concentrations start to decline.

ACTIVITIES FOR NEXT QUARTER - BUILDING 1/36

Implementation of the full-scale SVE system will be in accordance with the *Interim Actin Soil Vapor Extraction Workplan*, by Haley & Aldrich, submitted to the LARWQCB in October 2001. A total of forty-one single and dual completion wells designated 1-VEW-1 through 1-VEW-26 were installed in January 2002. The full-scale SVE system has been permitted through the SCAQMD. The extended SVE pilot test was terminated on March 29, 2002 when the pilot test unit was removed to accommodate the 1,000-scfm unit. Installation of temporary electrical power for the full-scale system was completed and inspected by the Los Angeles Department of Water and Power (DWP). Final inspection by the City of Los Angeles Building Department is tentatively scheduled for mid-April 2002. Startup for the full-scale SVE system is scheduled for April 2002.

A Second Quarter 2002 report summarizing activities during the period April 2002 through June 2002 will be prepared and submitted in July 2002.

BUILDING 2

The Building 2 extended pilot test system consists of fifteen 2-inch diameter, PVC, single and dual-completion SVE wells, a trailer-mounted, 800-actual cubic feet per minute (acfm) blower system, two 3,000-lb GAC vapor control vessels (primary and secondary), and associated piping. Haley & Aldrich installed the initial pilot test wells in September 2001 and began system operation on November 27, 2001. The location of the Building 2 pilot test is shown in Figure 1. The well field layout, including well screen depths is shown on Figure 3.

Operations for the first quarter 2002 covered the period January 1, 2002 to March 30, 2002. During this period, the system operated with an up-time efficiency of 86% and removed a total of approximately 1,413 lbs. of VOCs. Six GAC changeouts, 3,000 lbs. each, were completed during this period on January 17, January 31, February 8, February 21, March 6, and March 20, 2002.

During this quarter, a blower drive belt broke causing a two-day delay. Additionally, approximately 50 gallons of water was collected from the knockout drum each week. A modification to the piping allowed for water to accumulate and be removed before reaching the system, thus preventing the high water shut down.

FIRST QUARTER 2002 SVE OPERATION SUMMARY - BUILDING 2

Days of Operations	78
Available Days of Operation	90
Operational Time (%)	86
Mass Removed during Period (lbs.)	1,413
Cumulative Mass Removed (lbs.)	1,797

OPERATIONS INFORMATION - BUILDING 2

Operational data and VOC mass removal for the extended SVE pilot test system are tabulated and shown graphically in Attachment 2. The system operation timeline for the period is as follows:

• January 10, 2002	System shut down due to carbon breakthrough
• January 17, 2002	One GAC vessel was changed out (3,000 lbs.), system restarted
• January 27, 2002	System shut down due to high knockout water level
• January 29, 2002	Water removed from knockout and system restarted
• January 30, 2002	Blower drive belt broke, system shut down
• January 31, 2002	One GAC vessel was changed out (3,000 lbs.), blower drive belt replaced, system restarted
• February 8, 2002	One GAC vessel was changed out (3,000 lbs.), system restarted
• February 21, 2002	One GAC vessel was changed out (3,000 lbs.), system restarted
• March 6, 2002	One GAC vessel was changed out (3,000 lbs.), system restarted
• March 20, 2002	One GAC vessel was changed out (3,000 lbs.), system restated
• March 29, 2002	Began 14-day monitoring program under permit A/N 398264

Total days of operation for this period was approximately 78 with intermittent downtime due to GAC changeout. This equates to an up-time of approximately 86 percent when compared with the days available for operation as shown in Attachment 2, Graph 4.

During the period, VOC vapors were drawn from all wells at various times with valves open to optimized flow rates and concentrations at each of the wellheads. Individual optimal SVE well flow rates ranged from 5 to 98 scfm for a total flow rate from the well field of 65 to 400 scfm. Well optimization is discussed further below. The diluted process flowrates ranged from 590 to 795 scfm. Inlet vacuums ranged from 25 to 68 inches H_2O.

For this reporting period, approximately 1,413 lbs. of VOCs were extracted from the SVE wells and treated with GAC during 1,864 hours of operation. Since November 27, 2001 approximately 1,797 lbs. of VOCs have been extracted during approximately 2,160 hours of operation. Operation of the extended SVE pilot test system is in compliance with the multiple-locations permit from the South Coast Air Quality Management District (SCAQMD).

FIELD MEASUREMENTS - BUILDING 2

VOC concentrations were measured with a PID, calibrated to 100 ppmv hexane, as per the SCAQMD permit requirements, at the undiluted inlet, diluted inlet, between the GAC vessels, and at the exhaust stack. Flowrates were measured with a hand-held TSI Veloci-calc Plus hot-wire anemometer or by measuring the pressure differential across an orifice plate. Additional measurements were collected during operation including vacuum readings at each extraction well, pressures at the GAC vessels, and blower exhaust temperature. The field influent VOC measurements are plotted in Attachment 2, Graph 5.

VAPOR SAMPLING AND ANALYSIS - BUILDING 2

For this period, seven pairs of vapor samples were collected in Tedlar bags from the diluted process air stream (inlet to primary GAC vessel and exhaust from the secondary GAC vessel) and delivered to a state-certified laboratory for analysis. These samples were collected for SCAQMD permit compliance as well as system performance evaluation. The vapor samples were collected using a Tedlar bag in a vacuum case. Laboratory analyses were conducted on vapor grab samples using EPA Method 8260B/TO-14A. The full results of the vapor sampling are summarized in Attachment 2, Tables 4, 5, and 6.

Based on the results of the laboratory analysis of vapor grab samples, maximum diluted inlet VOC concentrations as ppbv for the period are as follows:

- Trichloroethene (TCE) 31,000 ppbv
- 1,1 Dichloroethene (1,1 DCE) 2,800 ppbv
- Trichloroethane (1,1,1 TCA) 800 ppbv
- 1,1 Dichloroethane (1,1-DCA) 220 ppbv
- Cis-1,2 Dichloroethene (cis-1,2-DCE) 220 ppbv
- Tetrachloroethene (PCE) 210 ppbv
- Methylene Chloride 110 ppbv
- Trichlorofluoromethane 19 ppbv

Reported influent concentrations varied during the period due to the effects of different operational configurations used during pilot testing. All exhaust sample analyses reported VOC concentrations within the permit limitations.

EXTRACTION WELL OPTIMIZATION - BUILDING 2

Data collection and adjustment of extraction well flow rates began in November 2001. Well optimization continued during the first quarter of 2002. Two rounds of VOC concentrations were measured at each extraction well at various flowrates during this quarter. These data were used to establish the flow regime under which maximum VOC concentrations can be extracted from the wells. Six extraction wells exhibiting the highest VOC concentrations were operated in February (within permit limitations) for approximately one month at flow regimes generating the maximum concentration per flowrate. Wells exhibiting lower concentrations, which do not significantly contribute to mass removal, were closed so that the available SVE system flow capacity could be used for the high-concentration wells.

On March 20, 2002, the six operating wells (2-VEW-1B, 6, 7B, 8, 9, and 10B) were again measured for maximum VOC concentrations at various flowrates. Comparison of the February and March data sets indicate that the wells are still operating within their optimal flow regimes, however the extracted vapor concentrations have declined by an average of 81%. These concentration decreases are shown in Figures 4 through 9.

ESTIMATED SVE OPERATION DURATION - BUILDING 2

In an effort to predict the asymptotic VOC concentrations and identify the time at which continued operation becomes impractical, a regression analysis of available data was performed. Undiluted influent vapor concentration data was used in the regression analysis to estimate the remaining period of operation for the Building 2 SVE system, based on mass removal rate and concentration targets. Because influent sample laboratory analyses results generally increased from November 2001 through February 2002, and have only recently begun to decrease, the regression analysis which follows is based on limited data. The analysis was

conducted according to the following regression equation:

$M_t = M_0 e^{(-kt)}$

Where:

M_t = mass removal rate (lbs./day) at time t (days)
M_0 = initial regressed mass removal rate (lbs./day)
k = exponential rate constant (day $^{-1}$)
t = time (days)

Two limiting endpoints were defined as the times at which a 90% and a 99% reduction in the regressed initial mass removal rate will occur ($t_{90\%}$ and $t_{99\%}$), assuming an exponential decline.

$t_{90\%} = 2.303 / k$
$t_{99\%} = 4.605 / k$

Based on the above calculations and data collected to-date, a 90% reduction in the regressed initial mass removal rate is predicted to occur after approximately three additional months of operation (June-July 2002). A 99% reduction in the regressed initial mass removal rate is predicted to occur after approximately eight additional months of operation (November-December 2002).

The above model was also applied to VOC concentration data from each extraction well. Data for the extraction wells is based on photoionization detector (PID) readings at the wellheads and includes more data points. An average rate constant for the group was calculated as follows:

$C_t = C_0 e^{(-kt)}$

Where:

C_t = concentration (ppmV) at time t (days)
C_0 = initial regressed concentration (ppmV)

Based on data collected to-date, a 90% reduction in the initial regressed well concentrations is predicted to occur in April-May 2002. A 99% reduction in the initial regressed well concentrations is predicted to occur in June or July 2002. These estimates will be refined over the next quarter as VOC concentrations continue to decline.

ACTIVITIES FOR NEXT QUARTER - BUILDING 2

The multiple locations SCAQMD permit was changed to allow an increase in total flow rate to 890 scfm. The extended SVE pilot test will continue operation at the increased flowrate on SVE wells selected to maximize mass removal. GAC changeouts will be conducted as necessary. Data collected will be applied to the regression model to further refine the predicted time when asymptotic concentrations and mass removal levels will be reached. A Second Quarter 2002 report summarizing activities during the period April 2002 through June 2002 will be prepared and submitted to BRC.

We appreciate the opportunity to provide environmental consulting services on this project. Please do not hesitate to call if you have any questions or comments.

Sincerely yours,
HALEY & ALDRICH, INC.

Richard M. Farson, PE
Senior Engineer

Scott P. Zachary
Project Manager

Enclosures:

Figure 1 – SVE Pilot Test Locations Building 1/36 and Building 2
Figure 2 – Building 1/36 SVE System Diagram
Figure 3 – Building 2 SVE Pilot Test System Diagram
Figure 4 – Building 2 SVE Pilot Test Flow vs. Concentration, 2-VEW-1B
Figure 5 – Building 2 SVE Pilot Test Flow vs. Concentration, 2-VEW-10B
Figure 6 – Building 2 SVE Pilot Test Flow vs. Concentration, 2-VEW-8B
Figure 7 – Building 2 SVE Pilot Test Flow vs. Concentration, 2-VEW-9
Figure 8 – Building 2 SVE Pilot Test Flow vs. Concentration, 2-VEW-6
Figure 9 – Building 2 SVE Pilot Test Flow vs. Concentration, 2-VEW-7B
Attachment 1 – Building 1/36 SVE Operational Data
Attachment 2 – Building 2 SVE Operational Data

cc: John Scott, Boeing
Scott Zachary, Haley & Aldrich
Richard Farson, Haley & Aldrich
File

PARCEL A

PARCEL C BOUNDARY

BLDG 45

BLDG 66A

BLDG 66

BLDG 41

BLDG 36

BUILDING 1/36 SVE PILOT TEST AREA

PARCEL C

BLDG 1

BLDG 34

BLDG 2

BUILDING 2
SVE PILOT-TEST
AREA

BLDG

BLDG 32

BLDG 57

BLDG 29

DG 67

BLDG 58

BLDG 20

BLDG 19

BLDG 3

PARCEL C BOUNDARY

N

0 20 40 80

FEET

ALL DIMENSIONS AND LOCATIONS APPROXIMATE

SOURCE OF BASEMAP: KENNEDY JENKS CONSULTANTS, 2000, SAMPLING AND ANALYSIS PLAN, BOEING REALTY CORPORATION'S C-6 FACILITY, PARCEL C, LOS ANGELES, CA, AUGUST 16, 2000.
G:\PROJECTS\ENVIRONMENTAL\28335\FIGURES\28335001.DWG

HALEY & ALDRICH

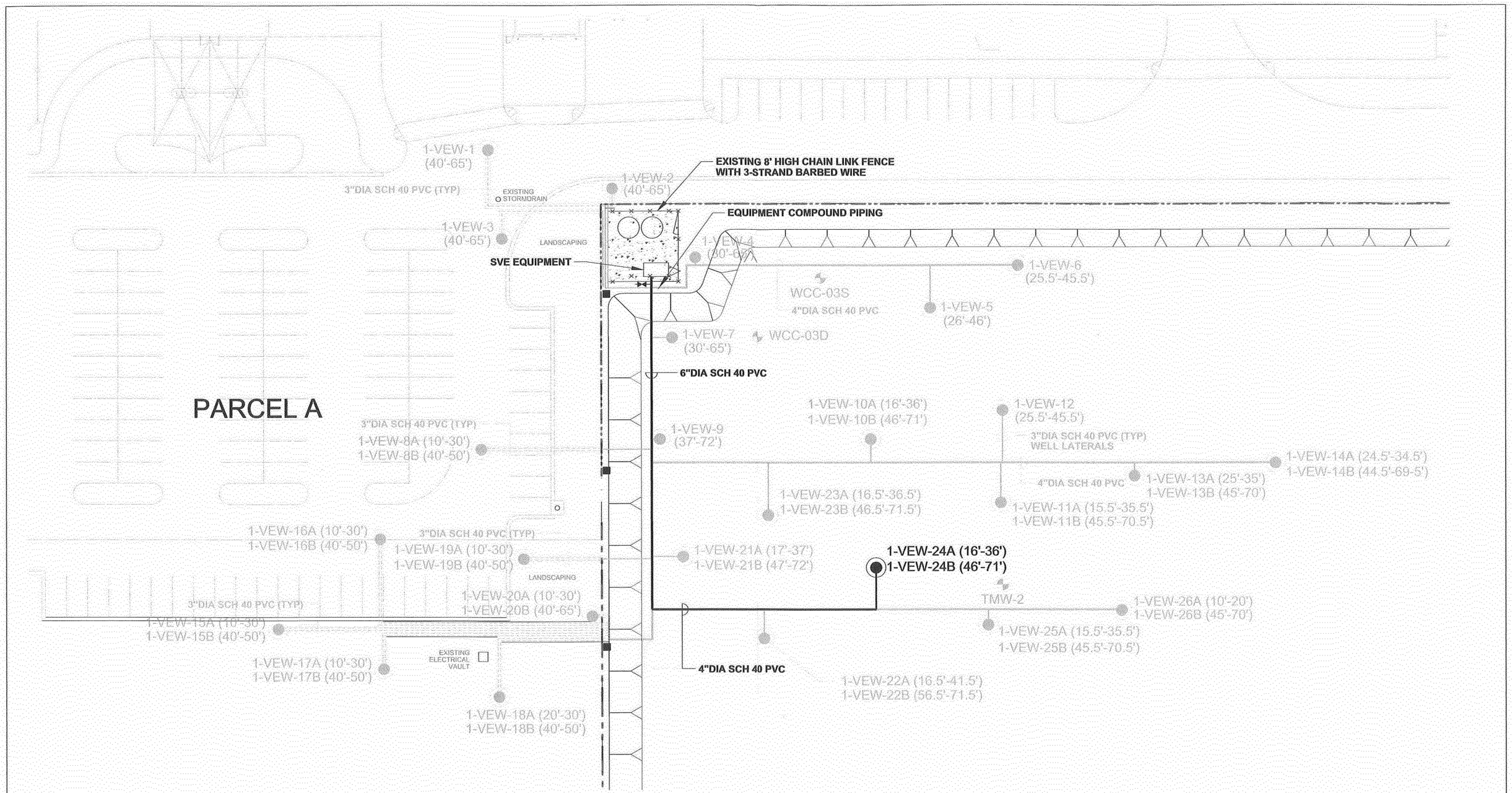
UNDERGROUND ENGINEERING & ENVIRONMENTAL SOLUTIONS

BOEING REALTY CORPORATION
FORMER C-6 FACILITY
LOS ANGELES, CALIFORNIA

FIGURE: 1

SVE PILOT TEST LOCATIONS BUILDING 1/36 AND BUILDING 2

SCALE: AS SHOWN	QA/QC:	PROJECT: 27960-003 28335-003
DRAWN: SAL	REVIEWED: RMF	DATE: 17 APRIL 2002



LEGEND

- PROPERTY LINE
- NEW ABOVE GROUND PIPING
- NEW BELOW GROUND PIPING
- SLOPE (TOP OF SLOPE)
- VALVE
- TMW-2 — EXISTING G.W. MONITORING WELL
- OPERATING VAPOR EXTRACTION WELL
- FULL-SCALE VAPOR EXTRACTION WELL TO BE STARTED APRIL / MAY 2002
- (40'-65') — SCREEN INTERVAL

N

0 15 30 60

FEET

NOTE: ALL DIMENSIONS AND LOCATIONS APPROXIMATE

G:\PROJECTS\ENVIRONMENTAL\28335\FIGURES\28335002.DWG

HALEY & ALDRICH

UNDERGROUND ENGINEERING & ENVIRONMENTAL SOLUTIONS

BOEING REALTY CORPORATION
FORMER C-6 FACILTY
LOS ANGELES, CALIFORNIA

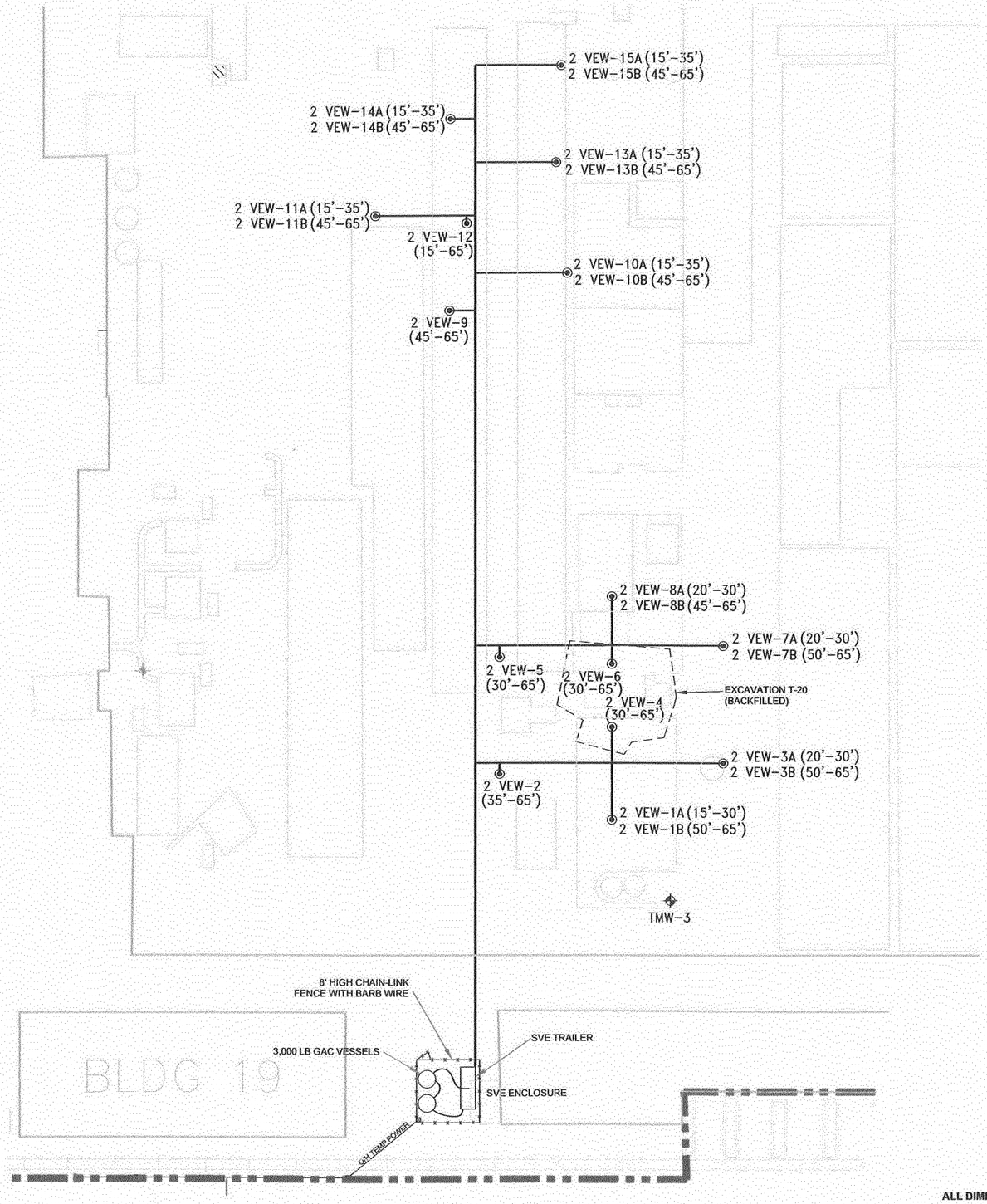
FIGURE: 2

BUILDING 1/36
SVE SYSTEM DIAGRAM

SCALE: AS SHOWN

PROJECT: 27950-003 28335-003

DRAWN: SAL | REVIEWED: RMF | DATE: 18 APRIL 2002



LEGEND

- VAPOR EXTRACTION WELL
- GROUNDWATER MONITOR WELL
- ABOVE-GROUND PIPING
- (15'-30') SCREENED INTERVALS (FEET BELOW GROUND SURFACE)

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BOEING REALTY CORPORATION
FORMER C-6 FACILTY
LOS ANGELES, CALIFORNIA

FIGURE: 3

BUILDING 2 SVE PILOT TEST SYSTEM DIAGRAM

SCALE: AS SHOWN | PROJECT: 27960-003 28335-003
DRAWN: SAL | REVIEWED: RMF | DATE: 18 APRIL 2002

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FIGURE 4
BUILDING 2 SVE PILOT TEST
FLOW VS. CONCENTRATION 2-VEW-1B

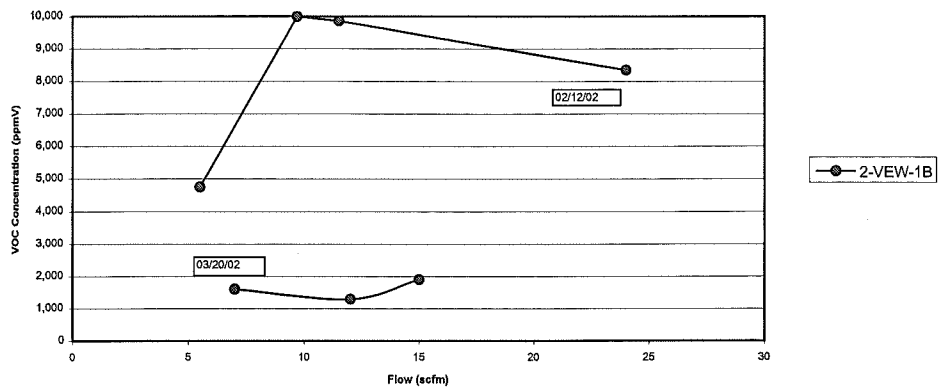


FIGURE 5
BUILDING 2 SVE PILOT TEST
FLOW VS. CONCENTRATION 2-VEW-10B

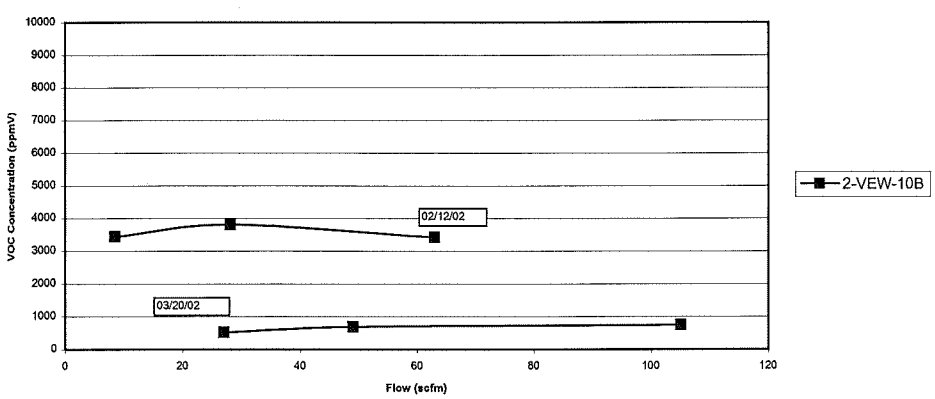


FIGURE 6
BUILDING 2 SVE PILOT TEST
FLOW VS. CONCENTRATION 2-VEW-8B

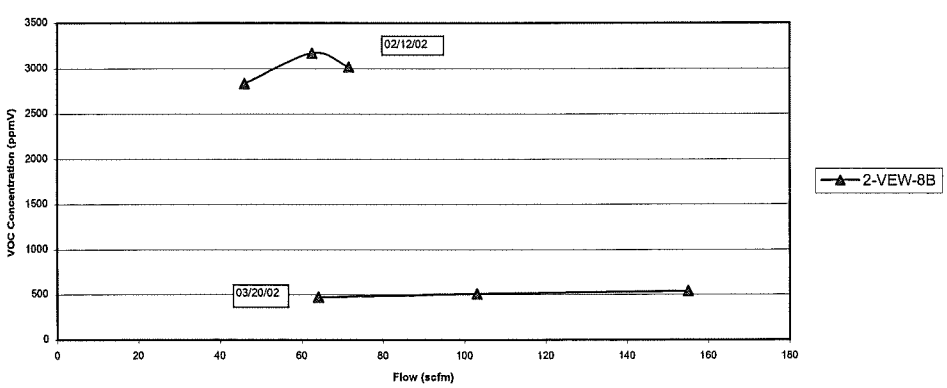


FIGURE 7
BUILDING 2 SVE PILOT TEST
FLOW VS. CONCENTRATION 2-VEW-9

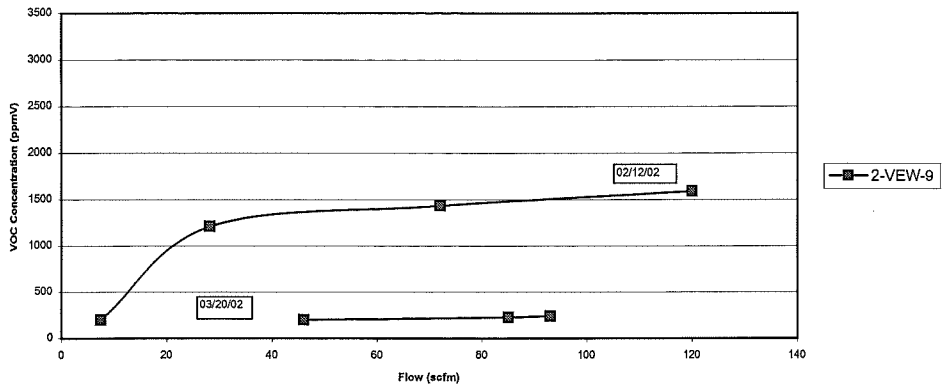


FIGURE 8
BUILDING 2 SVE PILOT TEST
FLOW VS. CONCENTRATION 2-VEW-6

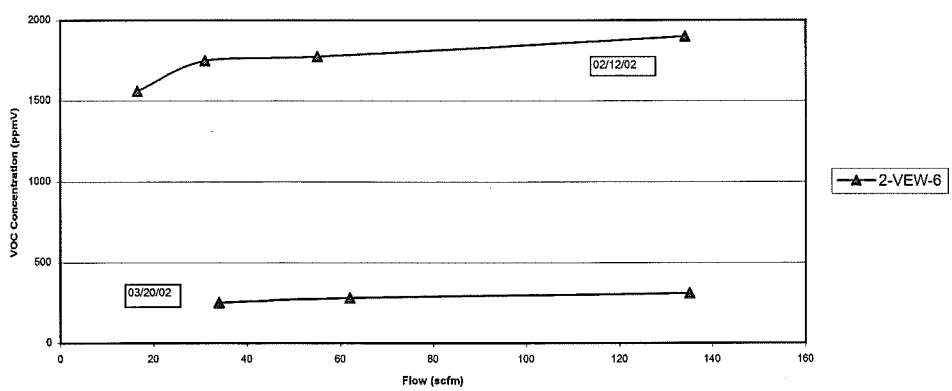
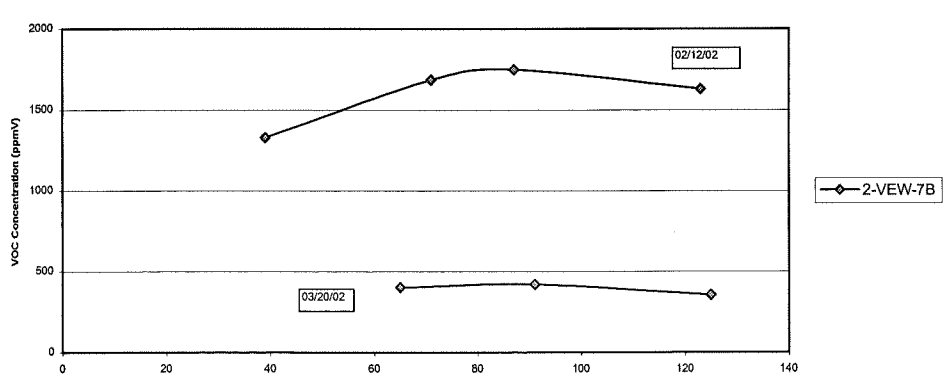


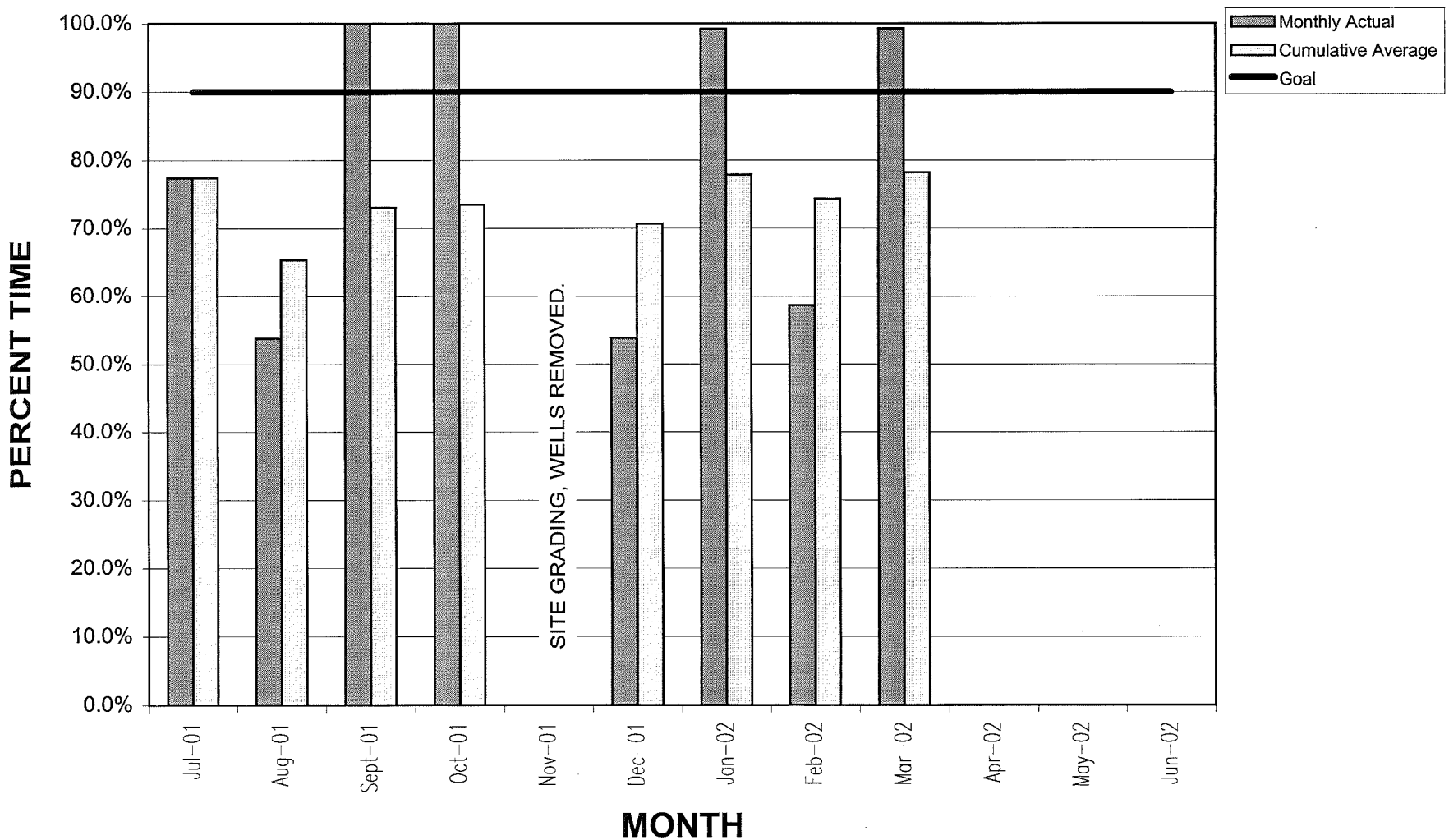
FIGURE 9
BUILDING 2 SVE PILOT TEST
FLOW VS. CONCENTRATION 2-VEW-7B



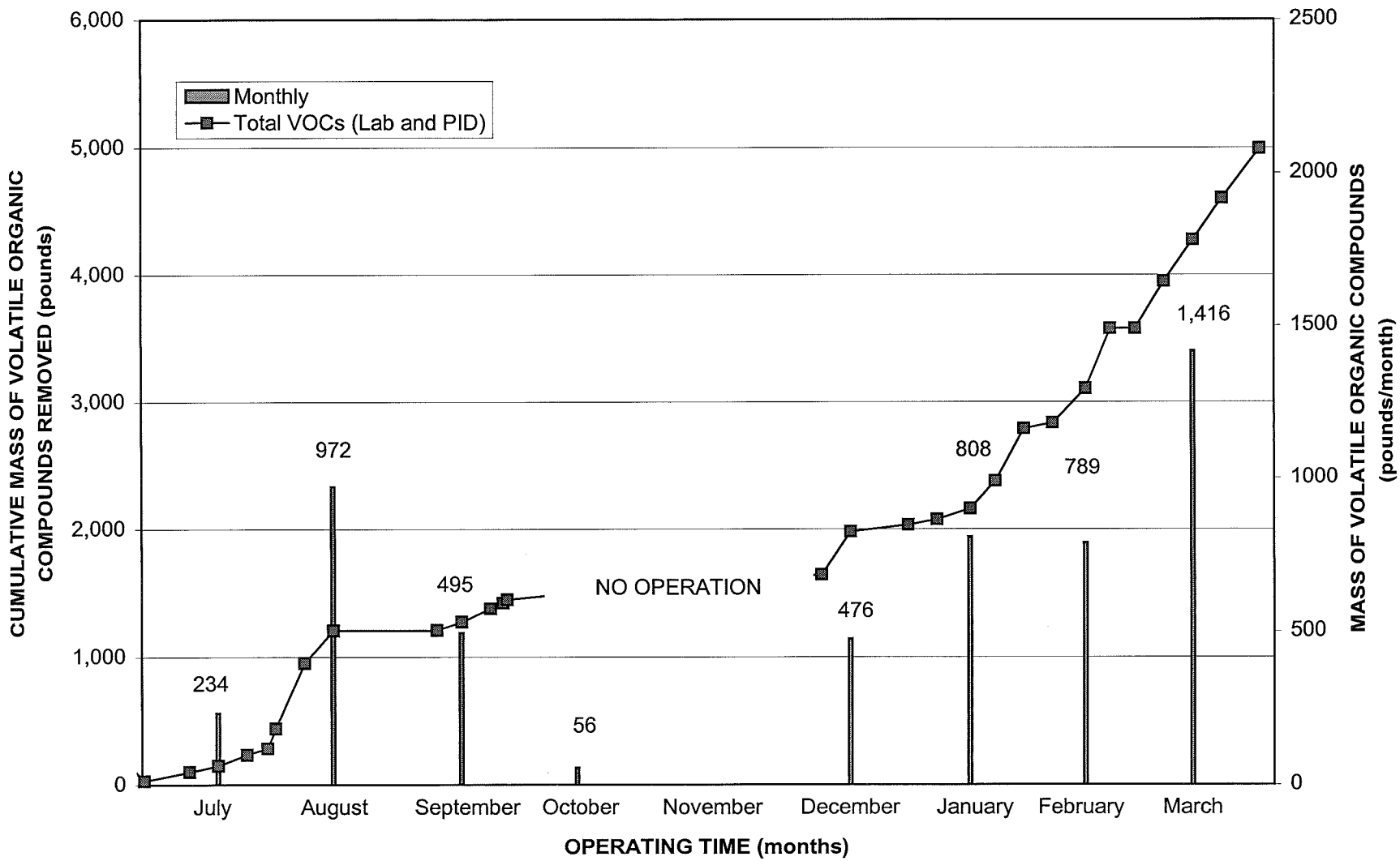
ATTACHMENT 1

BUILDING 1/36
SVE OPERATIONAL DATA

GRAPH 1
BUILDING 1/36 MONTHLY PERCENT OPERATION



GRAPH 2
BUILDING 1/36 CUMULATIVE VOLATILE ORGANIC COMPOUND MASS REMOVED



Haley & Aldrich, Inc.

4/25/2002

BOE-C6-0181977

GRAPH 3
BUILDING 1/36 SVE SYSTEM TOTAL VOC INFLUENT CONCENTRATIONS

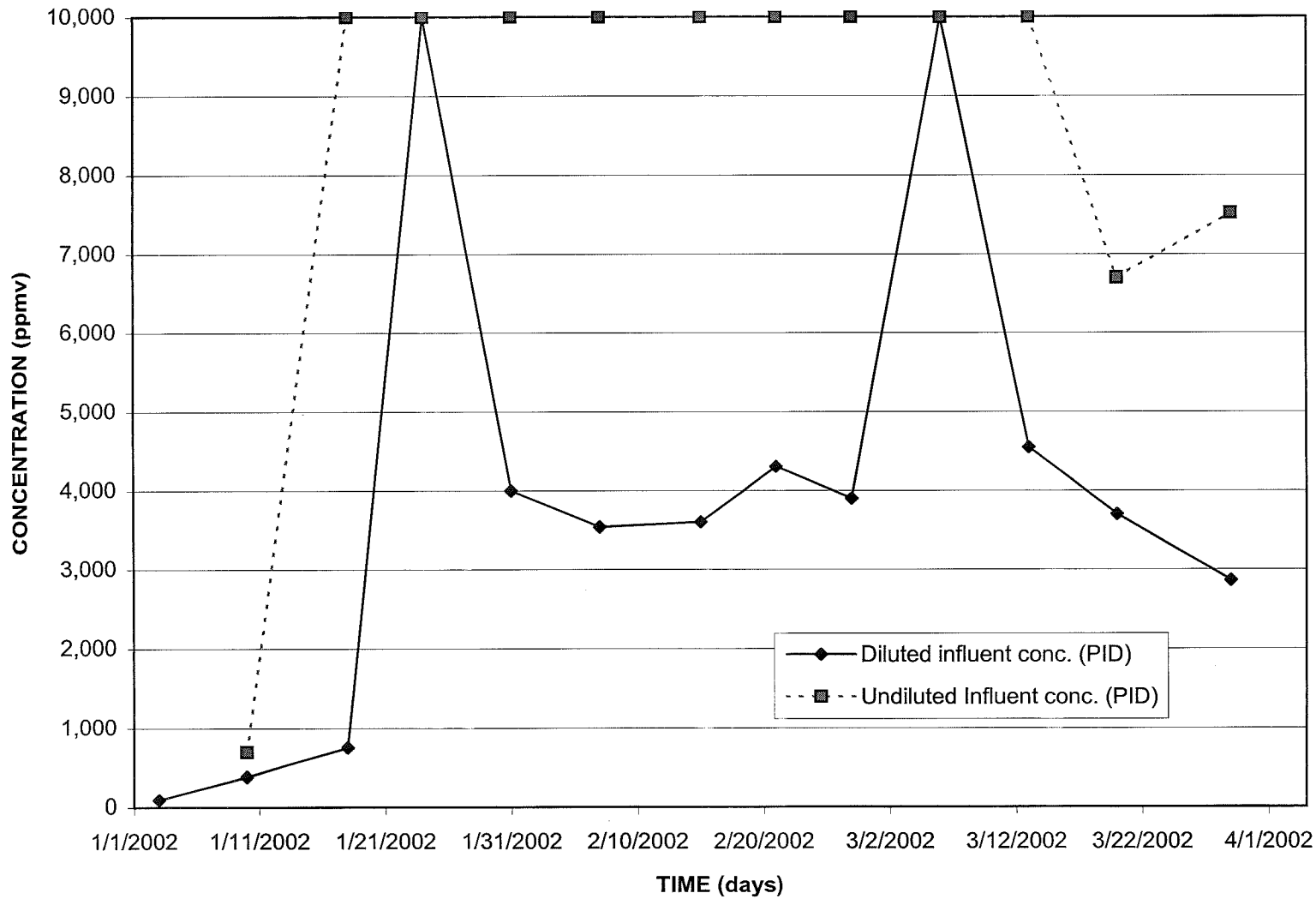


TABLE 1 - BUILDING 1/36 SVE SYSTEM INFLUENT LABORATORY DATA

Site Name: BRC Former C-6 Facility
Location: Torrance, California
System: Building 1/36 SVE system

COMPOUND	SAMPLE DATE	1/3/2002	2/7/2002	3/6/2002
	SAMPLE TYPE	Diluted Inlet	Diluted Inlet	Diluted Inlet
	LAB ID	DILUTED_ BLDG1_ 010302	DILUTED_ BLDG1_ 010302	DILUTED_ BLDG1_ 010302
1,1 Dichloroethene (ppbv)		32,000	140,000	140,000
Methylene chloride (ppbv)		ND	300	2,500
1,1 Dichloroethane (ppbv)		1,400	3,700	5,700
1,2 Dichloroethane (ppbv)		ND	250	560
cis-1,2 Dichloroethene (ppbv)		380	1,600	2,800
1,1,1 Trichloroethane (ppbv)		34,000	170,000	220,000
1,1,2 Trichloroethane (ppbv)		ND	120	ND
Trichloroethene (ppbv)		12,000	45,000	61,000
Tetrachloroethene (ppbv)		ND	190	1,600
Toluene (ppbv)		1,800	81,000	210,000
Xylene (ppbv)		ND	1,700	5,000

Notes:
ppbv = parts per billion by volume
ND = Below method detction limits

TABLE 2 - BUILDING 1/36 SVE SYSTEM FIELD DATA

Site Name: BRC Former C-6 Facility
Location: Torrance, California
System: Building 1/36 SVE system

DATE	HOUR METER	TIME	UNDILUTED FLOW RATE (1) (scfm)	UNDILUTED VACUUM (inches H_2O)	DILUTED FLOW RATE (1) (scfm)	DILUTED INFLUENT CONC. PID (2) (ppmv)	MID PONT CARBON CONC. PID (2) (ppmv)	EFFLUENT CARBON CONC. PID (2) (ppmv)	COMMENTS
01/10/02	1794	14:00	30	17	200	390	0.1	0.0	
01/18/02	1980	8:30	3	15	184	760	0.0	0.0	
01/24/02	2127	11:00	93	15	178	>9,999	0.0	0.0	
01/31/02	2294	13:45	NR	13	175	4,000	63	0.0	GAC Changeout
02/07/02	2324	16:50	50	13	165	3,540	2	0.0	
02/15/02	2517	17:50	40	NR	170	3,600	26	0.1	
02/21/02	2661	17:44	47	13	170	4,300	240	0.0	GAC Changeout
02/27/02	2661	14:17	46	14	185	3,900	1.5	0.0	
03/06/02	2828	13:40	110	17	195	>9,999	45	0.2	GAC Changeout
03/13/02	2995	16:20	56	14	163	4,550	2	0.0	
03/20/02	3155	8:30	NR	19.5	183	3,700	2	0.2	
03/29/02	3371	8:15	60	13	166	2,864	57	0.2	System shut-down and removal

Notes:
(1) Direct flow readings taken by hand-held TSI Veloci-calc Plus or orifice plate
(2) Measurements taken with a MiniRae 2000 PID calibrated to 100 ppmv Hexane or 100 ppmv Isobutylene, expressed as Hexane
scfm = standard cubic feet per minute
ppmv = parts per million by volume
NR = Not Recorded
> Greater than

TABLE 3 - BUILDING 1/36 SVE SYSTEM WELLFIELD DATA

Site Name: BRC Former C-6 Facility
Location: Torrance, California
System: Building 1/36 SVE system

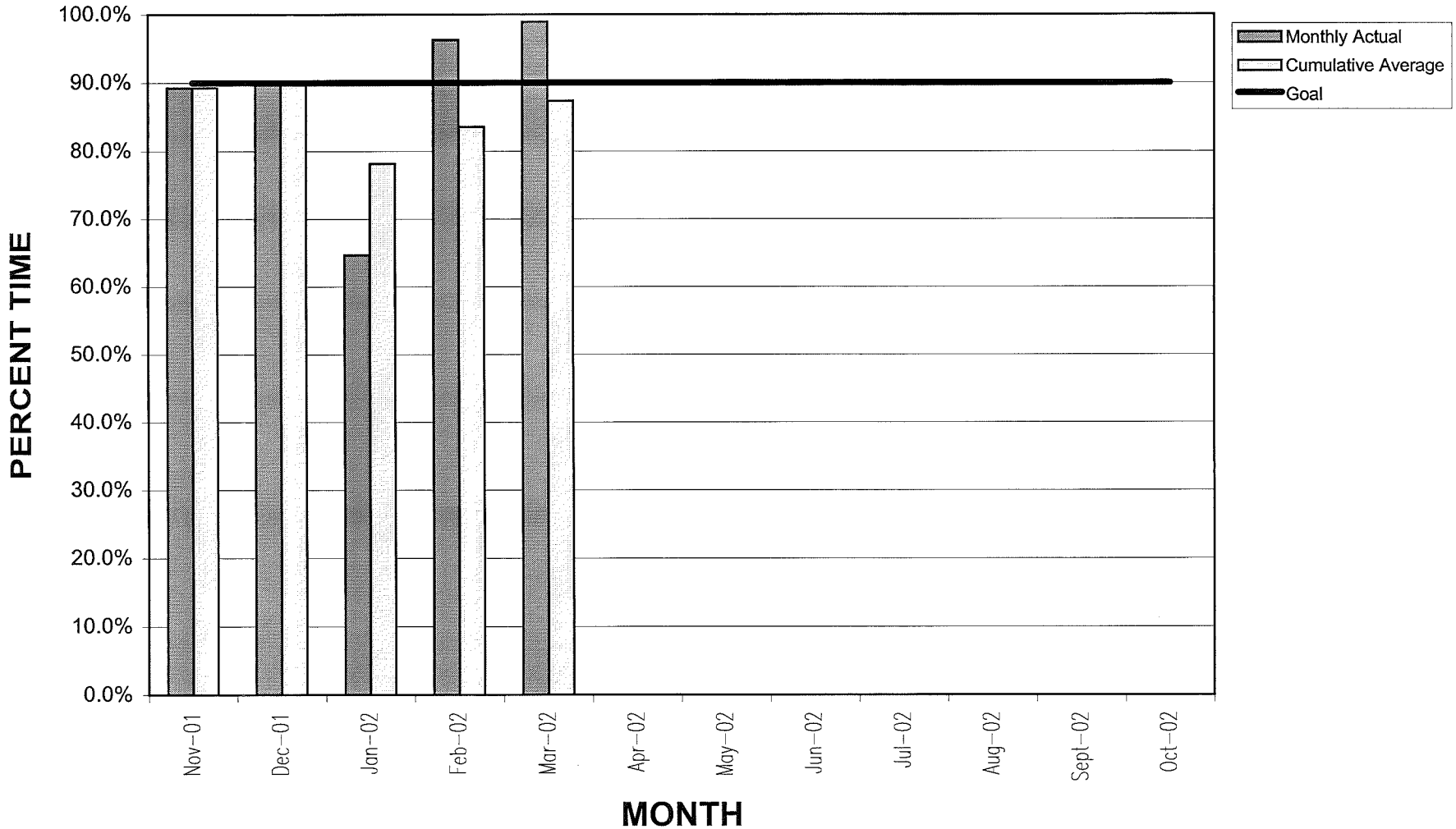
WELL ID	DATE	TIME	FLOW RATE (scfm)	VACUUM (inches H_2O)	WELLHEAD PID (ppmv)	COMMENTS
1-VEW-24A	1/18/2002	10:40	NA	88	> 9,999 *	Well opened
	1/24/2002	11:00	NA	75	> 9,999 *	
	1/31/2002	13:45	33	23	> 9,999	
	2/7/2002	16:50	31	26	> 9,999	
	2/15/2002	17:51	NA	NA	> 9,999 *	
	2/21/2002	17:44	46.5	30	> 9,999	
	2/27/2002	14:17	32	30	> 9,999	
	3/6/2002	13:40	94	64	> 9,999	
	3/13/2002	16:20	45	30	> 9,999	
	3/20/2002	8:30	42	32	> 9,999	
	3/29/2002	8:15	9	28	4,000	
	12/13/2001	15:00	10	54	> 9,999 *	Well opened
	12/20/2001	14:15	5	47	> 800 *	
1-VEW-24B	1/3/2002	13:15	32	48	> 320 *	
	1/10/2002	14:00	30	48	> 700 *	
	1/18/2002	8:25	25	90	> 760 *	
	1/18/2002	10:40	NA	90	> 2,500 *	
	1/24/2002	11:00	93	90	> 9,999 *	
	1/31/2002	13:45	9	23	> 9,999	
	2/7/2002	16:50	9	26	> 9,999	
	2/15/2002	17:51	NA	NA	> 9,999 *	
	2/21/2002	17:44	11	30	> 9,999	
	2/27/2002	14:17	8	31	> 9,999	
	3/6/2002	13:40	13	64	> 9,999	
	3/13/2002	16:20	10.5	30	> 9,999	
	3/20/2002	8:30	5.8	32	> 9,999	
	3/29/2002	8:15	38	28	> 9,999	

Notes:
scfm = standard cubic feet per minute
ppmv = parts per million by volume
NA = Data not applicable or not recorded
> Greater than
* Well head readings not taken. Estimates based on diluted inlet concentrations

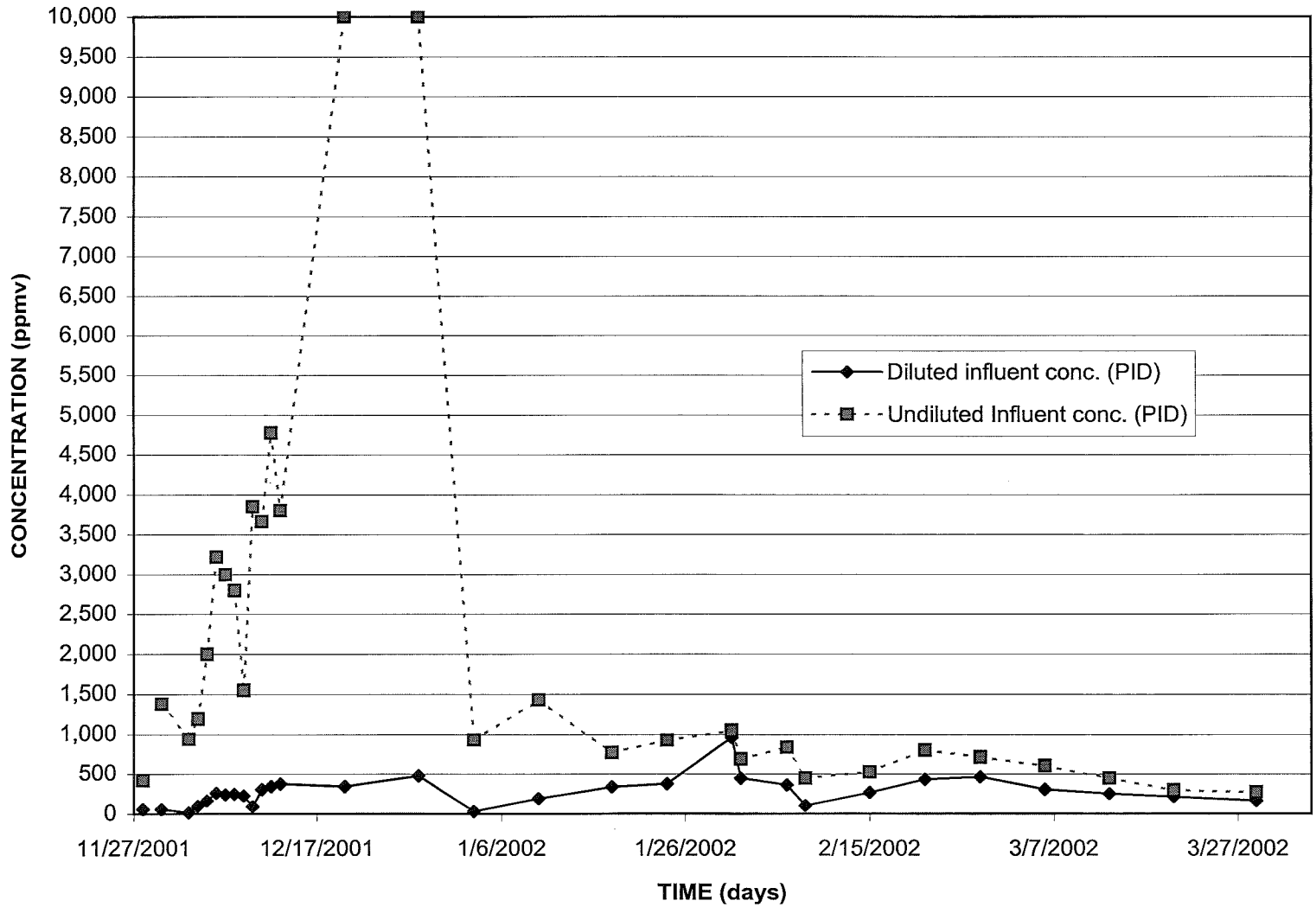
ATTACHMENT 2

BUILDING 2
SVE OPERATIONAL DATA

GRAPH 4
BUILDING 2 MONTHLY PERCENT OPERATION



GRAPH 5
BUILDING 2 SVE SYSTEM TOTAL VOC INFLUENT CONCENTRATIONS



GRAPH 6
BUILDING 2 CUMULATIVE VOLATILE ORGANIC COMPOUND MASS REMOVED

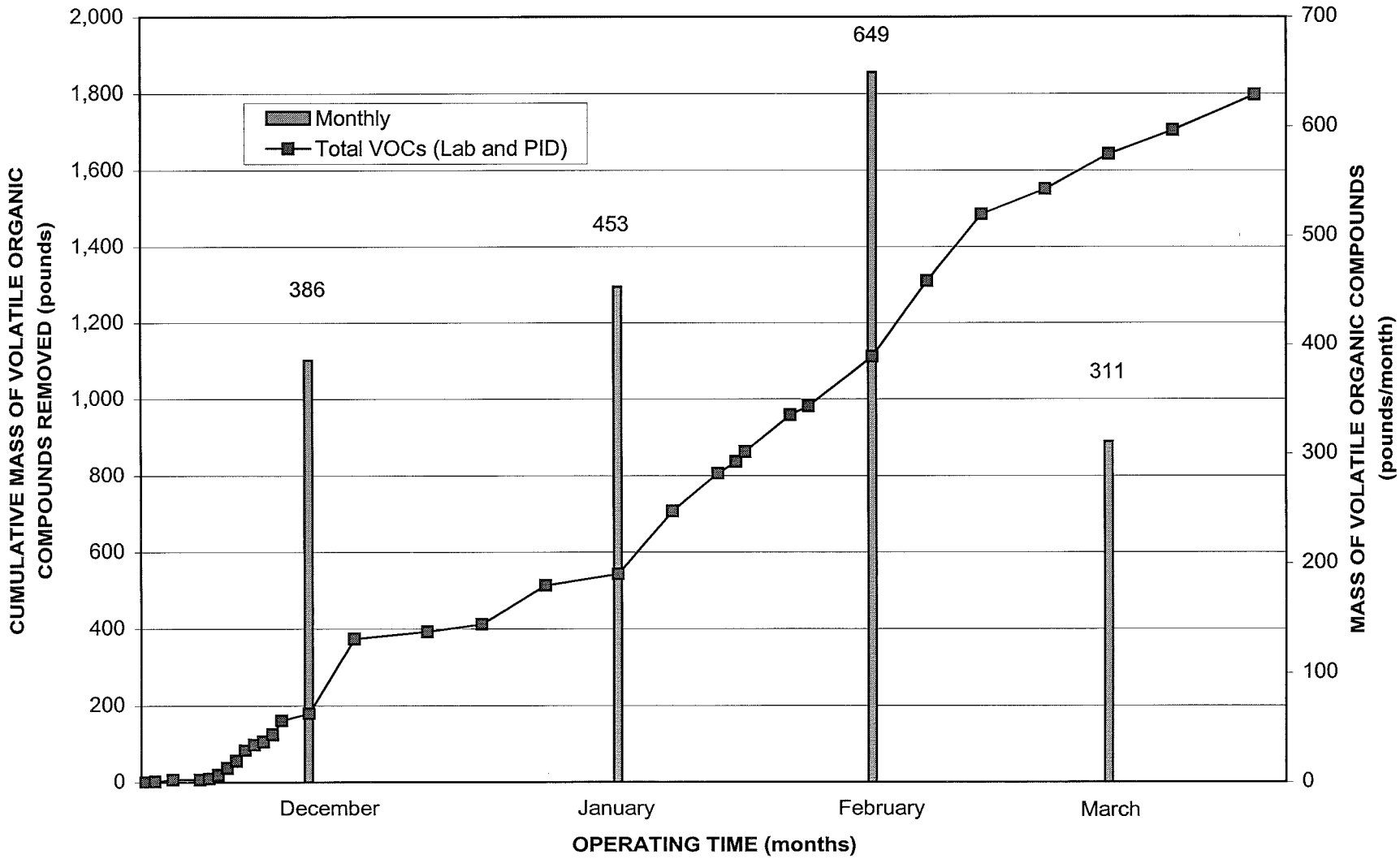


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TABLE 4 - BUILDING 2 SVE SYSTEM INFLUENT LABORATORY DATA

Site Name: BRC Former C-6 Facility
Location: Torrance, California
System: Building 2 SVE system

COMPOUND	SAMPLE DATE	1/3/2002	2/6/2002	3/6/2002
	SAMPLE TYPE	Diluted Inlet	Diluted Inlet	Diluted Inlet
	LAB ID	DILUTED_INLET_ BLDG_2_01/03/02	DILUTED_INLET_ BLDG_2_02/06/02	DILUTED_INLET_ BLDG_2_03/06/02
1,1 Dichloroethene (ppbv)		660	2,800	1,500
cis-1,2-Dichloroethene (ppbv)		ND	210	120
1,1-Dichlrorethane (ppbv)		ND	220	86
1,1,1 Trichloroethane (ppbv)		280	800	370
Trichloroethene (ppbv)		7,500	31,000	26,000
Tetrachloroethene (ppbv)		84	210	100
Trichlorofluoromethane (ppbv)		19	ND	ND

Notes:
ppbv = parts per billion by volume

TABLE 5 - BUILDING 2 SVE SYSTEM FIELD DATA

Site Name: BRC Former C-6 Facility
Location: Torrance, California
System: Building 2 SVE system

DATE	HOUR METER	TIME	UNDILUTED FLOW RATE (1) (scfm)	UNDILUTED VACUUM (inches H_2O)	DILUTED FLOW RATE (1) (scfm)	DILUTED INFLUENT CONC. PID (2) (ppmv)	MID PONT CARBON CONC. PID (2) (ppmv)	EFFLUENT CARBON CONC. PID (2) (ppmv)	COMMENTS
1/3/2002	785	15:00	65	29	795	32	0.0	0.0	
01/10/02	953	15:00	150	25	765	195	51.0	0.0	GAC Changeout
01/18/02	983	18:00	350	53	720	342	0.3	0.1	
01/24/02	1124	15:10	360	52	735	380	40.2	0.0	
01/31/02	1220	15:48	400	38	765	960	NR	0.0	Data after GAC Changeout
02/01/02	1238	10:00	400	27	760	450	0.0	0.0	
02/06/02	1360	13:00	390	20	760	365	87.0	0.2	GAC Changeout
02/08/02	1385	9:20	190	45	740	105	43.0	0.0	
02/15/02	1553	11:00	400	27	730	270	10.7	0.0	
02/21/02	1693	8:07	400	41	705	437	71.0	0.0	GAC Changeout
02/27/02	1838	10:30	380	68	590	465	37.0	0.0	
03/06/02	2004	9:00	378	68	600	310	53.2	0.2	GAC Changeout
03/13/02	2173	14:35	375	67	590	259	28.0	0.0	
03/20/02	2334	10:45	400	67	655	220	10.3	0.2	GAC Changeout
03/29/02	2549	10:00	385	61	605	168	16.0	0.1	

Notes:
(1) Direct flow readings taken by hand-held TSI Veloci-calc Plus or orifice plate
(2) Measurements taken with a MiniRae 2000 PID calibrated to 100 ppmv Hexane, expressed as Hexane
scfm = standard cubic feet per minute
ppmv = parts per million by volume
NR = Not Recorded

TABLE 6 - BUILDING 2 SVE SYSTEM WELLFIELD DATA

Site Name: BRC Former C-6 Facility
Location: Torrance, California
System: Building 2 SVE system

WELL ID	DATE	TIME	FLOW RATE (1) (scfm)	VACUUM (inches of H2O)	WELLHEAD PID (2) (ppmv)	COMMENTS
2-VEW-1A	11/27/2001	13:00	39	20	1,200	Well Closed 11/28/01-1/2/02
	1/3/2002	15:00	NA	22	140	Well Opened
	1/10/2002	15:00	NA	1.3	NA	"
	1/18/2002	18:00	39	48	340	"
	1/24/2002	15:10		1.7	NA	"
	1/31/2002	15:48	30	31	200	"
	2/1/2002	10:00	22	23	96	"
	2/6/2002	13:00	16	16	180	"
	2/15/2002	11:00	20	19	98	Well Closed
	3/20/2002	14:00	NA	45	12	"
	3/29/2002	14:20	3.2	9.5	NA	Well Opened
	3/30/2002	10:58	1	11	NA	"
	3/31/2002	10:31	0.5	11	NA	"
	4/1/2002	16:50	NA	11	NA	"
	4/2/2002	11:40	NA	11	NA	"
2-VEW-1B	11/27/2001	13:00	11	17	9,999	Well Closed 11/28/01-1/2/02
	1/3/2002	15:00	NA	29	2,800	Well Opened
	1/10/2002	15:00	NA	1.6	NA	"
	1/18/2002	18:00	NA	2.9	NA	Well Closed
	1/24/2002	15:10	17	48	9,999	"
	1/31/2002	15:48	8	31	9,999	"
	2/1/2002	10:00	10	23	6,500	"
	2/6/2002	13:00	5.3	16	6,800	"
	2/15/2002	11:00	5.5	19	3,980	"
	2/27/2002	10:30	14.2	52	4,230	"
	3/6/2002	9:00	8.5	48	2,790	"
	3/13/2002	14:35	9	50	4,240	"
	3/20/2002	10:45	12	50	1,300	"
	3/29/2002	10:00	10.1	54	1,800	Well Opened
	3/29/2002	14:20	18.1	46	1,350	"
	3/30/2002	10:58	9	48	1,478	"
	3/31/2002	10:31	8.4	48	1,744	"
	4/1/2002	16:50	7.4	49	1,475	"
	4/2/2002	11:40	6.8	51	1,535	"
2-VEW-2	11/27/2001	13:00	60	25	1,300	Well Closed 11/28/01-1/2/02
	1/3/2002	15:00	70	20	740	Well Opened
	1/10/2002	15:00	NA	1.5	NA	Well Closed
	1/18/2002	18:00	NA	3.2	NA	"
	1/24/2002	15:10	NA	2	NA	"
	1/31/2002	15:48	60	31	9,999	Well Opened
	2/1/2002	10:00	29	22	335	"
	2/6/2002	13:00	18	15	260	"
	2/15/2002	11:00	23	19	94	Well Closed
	3/20/2002	14:00	NA	47	18	"
	3/29/2002	14:20	24	19	8	"
	3/30/2002	10:58	24	21	8	Well Opened
	3/31/2002	10:31	24	20	3	"
	4/1/2002	16:50	25	21	4	"
	4/2/2002	11:40	NA	13	NA	"
2-VEW-3A	11/27/2001	13:00	20	20	710	Well Closed 11/28/01-1/2/02
	1/3/2002	15:00	12	22	160	Well Opened
	1/10/2002	15:00	NA	1.3	NA	"
	1/18/2002	18:00	23	50	560	"
	1/24/2002	15:10	11	49	470	"
	1/31/2002	15:48	17	32	360	"
	2/1/2002	10:00	7	23	250	"
	2/6/2002	13:00	7	17	210	"
	2/15/2002	11:00	6.5	19	85	Well Closed
	3/20/2002	14:00	NA	50	NA	"
	3/29/2002	10:00	94	54	31	Well Opened
	3/29/2002	14:20	1	9	NA	"
	3/30/2002	10:58	0.6	11	NA	"
	3/31/2002	10:31	0.5	10	NA	"
	4/1/2002	16:50	NA	10	NA	"
	4/2/2002	11:40	NA	12	NA	"

TABLE 6 - BUILDING 2 SVE SYSTEM WELLFIELD DATA

Site Name: BRC Former C-6 Facility
Location: Torrance, California
System: Building 2 SVE system

WELL ID	DATE	TIME	FLOW RATE (1) (scfm)	VACUUM (inches of H2O)	WELLHEAD PID (2) (ppmv)	COMMENTS
2-VEW-3B	11/27/2001	13:00	11	25.0	2,250	Initial Startup
	11/28/2001	13:15	NA	0.1	NA	Well Closed
	11/30/2001	14:20	NA	0.7	NA	"
	12/3/2001	17:10	NA	0.2	NA	"
	12/4/2001	10:15	NA	0.9	NA	"
	12/5/2001	16:30	NA	0.6	NA	"
	12/6/2001	8:30	NA	0.8	NA	"
	12/7/2001	7:30	NA	1.2	NA	"
	12/8/2001	16:00	NA	0.1	NA	"
	12/9/2001	13:00	NA	0.0	NA	"
	12/10/2001	16:00	NA	0.4	NA	"
	12/11/2001	11:00	NA	1.4	NA	"
	12/12/2001	19:15	8	29.5	1,900	Well Opened
	12/13/2001	11:15	8	29.0	1,675	"
	12/20/2001	15:10	17	39.0	1,345	"
	12/28/2001	11:00	15	23.0	220	"
	1/3/2002	15:00	15	23.0	220	"
	1/10/2002	15:00	NA	1.5	NA	"
	1/18/2002	18:00	NA	3.3	NA	"
	1/24/2002	15:10	NA	3.0	NA	"
	1/31/2002	15:48	7	32.0	390	"
	2/1/2002	10:00	10	23.0	220	"
	2/6/2002	13:00	7	17.0	230	"
	2/15/2002	11:00	5.7	19	320	Well Closed
	3/20/2002	14:00	NA	47	203	"
	3/29/2002	14:20	18	46	296	Well Opened
	3/30/2002	10:58	8.4	48	226	"
	3/31/2002	10:31	9	48	231	"
	4/1/2002	16:50	9.3	48	197	"
	4/2/2002	11:40	11.3	52	172	"
2-VEW-4	11/27/2001	13:00	30	25	1,250	Well Closed 11/28/01-1/2/02
	1/3/2002	15:00	20	15	450	Well Opened
	1/10/2002	15:00	NA	1.8	NA	"
	1/18/2002	18:00	NA	3.8	NA	"
	1/24/2002	15:10	NA	2.3	NA	"
	1/31/2002	15:48	33	31	940	"
	2/1/2002	10:00	23	23.5	565	"
	2/6/2002	13:00	21	17	680	"
	2/15/2002	11:00	20.5	19	400	Well Closed
	3/20/2002	14:00	NA	41	17	"
	3/29/2002	14:20	59	45	60	Well Opened
	3/30/2002	10:58	51.5	48	167	"
	3/31/2002	10:31	55.5	47	235	"
	4/1/2002	16:50	51.5	48	270	"
	4/2/2002	11:40	56	50	257	"
2-VEW-5	11/27/2001	13:00	90	25	1,075	Well Closed 11/28/01-1/2/02
	1/3/2002	15:00	75	17	800	Well Opened
	1/10/2002	15:00	NA	2.8	NA	"
	1/18/2002	18:00	NA	3.4	NA	"
	1/24/2002	15:10	NA	2.5	NA	"
	1/31/2002	15:48	65	30	1,150	"
	2/1/2002	10:00	47	20	700	"
	2/6/2002	13:00	32	16	910	"
	2/15/2002	11:00	36	19	570	Well Closed
	3/20/2002	14:00	NA	43	75	"
	3/29/2002	14:20	81	39	76	"
	3/30/2002	10:58	80.5	41	99	Well Opened
	3/31/2002	10:31	80.5	41	102	"
	4/1/2002	16:50	80	41	107	"
	4/2/2002	11:40	86	43	91	"

TABLE 6 - BUILDING 2 SVE SYSTEM WELLFIELD DATA

Site Name: BRC Former C-6 Facility
Location: Torrance, California
System: Building 2 SVE system

WELL ID	DATE	TIME	FLOW RATE (1) (scfm)	VACUUM (inches of H2O)	WELLHEAD PID (2) (ppmv)	COMMENTS
2-VEW-6	11/27/2001	13:00	52	25	9,999	Well Closed 11/28/01-1/2/02
	1/3/2002	15:00	NA	15	625	Well Opened
	1/10/2002	15:00	NA	2.3	NA	Well Closed
	1/18/2002	18:00	NA	3.6	NA	"
	1/24/2002	15:10	NA	2.5	NA	"
	1/31/2002	15:48	40	30	3,130	Well Opened
	2/1/2002	10:00	27	20	1,500	"
	2/6/2002	13:00	21	16	1,530	"
	2/15/2002	11:00	25	19	945	Well Closed
	2/27/2002	10:30	68	35	520	"
	3/6/2002	9:00	81	33	433	"
	3/13/2002	14:35	81	34	335	"
	3/20/2002	10:45	62	30	280	"
	3/29/2002	10:00	56	28	241	Well Opened
	3/29/2002	14:20	85	46	246	"
	3/30/2002	10:58	78.5	44	263	"
	3/31/2002	10:31	87	42	262	"
	4/1/2002	16:50	81	43	245	"
	4/2/2002	11:40	86	45	208	"
2-VEW-7A	11/27/2001	13:00	13	25	360	Well Closed 11/28/01-1/2/02
	1/3/2002	15:00	75	20	100	Well Opened
	1/10/2002	15:00	NA	1.4	NA	"
	1/18/2002	18:00	17	50	600	"
	1/24/2002	15:10	15	48	940	"
	1/31/2002	15:48	8	30	1,100	"
	2/1/2002	10:00	6	21	730	"
	2/6/2002	13:00	16	4.5	775	"
	2/15/2002	11:00	6	18	333	Well Closed
	3/20/2002	14:00	NA	53	17	"
	3/29/2002	14:20	11.6	41	25	Well Opened
	3/30/2002	10:58	12	44	39	"
	3/31/2002	10:31	13.6	43.5	54	"
	4/1/2002	16:50	14.1	43	73	"
	4/2/2002	11:40	13	46	73	"
2-VEW-7B	11/27/2001	13:00	60	25.0	600	Initial Startup
	11/28/2001	13:15	NA	0.3	NA	Well Closed
	11/30/2001	14:20	NA	0.9	NA	"
	12/3/2001	17:10	NA	0.2	NA	"
	12/4/2001	10:15	NA	1.2	NA	"
	12/5/2001	16:30	NA	0.8	NA	"
	12/6/2001	8:30	NA	1.0	NA	"
	12/7/2001	7:30	NA	1.4	NA	"
	12/8/2001	16:00	NA	0.1	NA	"
	12/9/2001	13:00	NA	0.0	NA	"
	12/10/2001	16:00	NA	0.5	NA	"
	12/11/2001	11:00	NA	1.6	NA	"
	12/12/2001	19:15	75	27.0	5,450	Well Opened
	12/13/2001	11:15	85	29.0	4,380	"
	12/20/2001	15:10	95	34.0	9,999	"
	12/28/2001	11:00	75	20.0	100	"
	1/3/2002	15:00	75	20.0	100	"
	1/10/2002	15:00	NA	1.9	NA	"
	1/18/2002	18:00	NA	3.5	NA	"
	1/24/2002	15:10	NA	2.4	NA	"
	1/31/2002	15:48	57	29.0	1,060	"
	2/1/2002	10:00	40	21.0	920	"
	2/6/2002	13:00	34	17.0	850	"
	2/15/2002	11:00	34	18	850	"
	2/27/2002	10:30	70	36	800	"
	3/6/2002	9:00	65	34	677	"
	3/13/2002	14:35	78	35	495	"
	3/20/2002	10:45	91	35	420	"
	3/29/2002	10:00	64	44	422	"
	3/29/2002	14:20	77.5	40	385	"
	3/30/2002	10:58	58.5	42	406	"
	3/31/2002	10:31	59	41.5	431	"
	4/1/2002	16:50	78	42	375	"
	4/2/2002	11:40	81	44	351	"

TABLE 6 - BUILDING 2 SVE SYSTEM WELLFIELD DATA

Site Name: BRC Former C-6 Facility
Location: Torrance, California
System: Building 2 SVE system

WELL ID	DATE	TIME	FLOW RATE (1) (scfm)	VACUUM (inches of H2O)	WELLHEAD PID (2) (ppmv)	COMMENTS
2-VEW-8A	11/27/2001	13:00	14	25	1,675	Well Closed 11/28/01-1/2/02
	1/3/2002	15:00	10	20	240	Well Opened
	1/10/2002	15:00	NA	2.5	NA	"
	1/18/2002	18:00	24	50	855	"
	1/24/2002	15:10	14	48	1,030	"
	1/31/2002	15:48	6	30	980	"
	2/1/2002	10:00	7	21	1,010	"
	2/6/2002	13:00	6	16	1,400	"
	2/15/2002	11:00	6.5	18	480	Well Closed
	3/20/2002	14:00	NA	55	24	"
	3/29/2002	14:20	7	43	59	Well Opened
	3/30/2002	10:58	7	43	76	"
	3/31/2002	10:31	9.8	43	81	"
	4/1/2002	16:50	9.4	45	79	"
	4/2/2002	11:40	9.5	46	117	"
2-VEW-8B	11/27/2001	13:00	56	30	3,750	Well Closed 11/28/01-1/2/02
	1/3/2002	15:00	50	20	990	Well Opened
	1/10/2002	15:00	64	21	2,750	"
	1/18/2002	18:00	NA	3.7	NA	Well Closed
	1/24/2002	15:10	NA	2.8	NA	"
	1/31/2002	15:48	46	29	1,300	Well Opened
	2/1/2002	10:00	30	21	1,370	"
	2/6/2002	13:00	22	16	790	"
	2/15/2002	11:00	22	19	1,830	"
	2/27/2002	10:30	76	44	1,185	"
	3/6/2002	9:00	54	42	930	"
	3/13/2002	14:35	90	42	715	"
	3/20/2002	10:45	103	41	510	"
	3/29/2002	10:00	62	44	472	"
	3/29/2002	14:20	60	42	500	"
	3/30/2002	10:58	62.5	44	712	"
	3/31/2002	10:31	60.5	44.5	724	"
	4/1/2002	16:50	60	43	740	"
	4/2/2002	11:40	64	46	664	"
2-VEW-9	11/27/2001	13:00	38	30	2,550	Well Closed 11/28/01-1/2/02
	1/3/2002	15:00	75	19	390	Well Opened
	1/10/2002	15:00	NA	3.2	NA	Well Closed
	1/18/2002	18:00	NA	4.8	NA	"
	1/24/2002	15:10	NA	4.2	NA	"
	1/31/2002	15:48	24	29	1,970	Well Opened
	2/1/2002	10:00	17	21	1,100	"
	2/6/2002	13:00	14	17	750	"
	2/15/2002	11:00	14	20	795	"
	2/27/2002	10:30	98	60	355	"
	3/6/2002	9:00	94	56	350	"
	3/13/2002	14:35	91	56	305	"
	3/20/2002	10:45	93	58	243	"
	3/29/2002	10:00	77	50	241	"
	3/29/2002	14:20	52.5	44	334	"
	3/30/2002	10:58	51	45	532	"
	3/31/2002	10:31	53	45	1,325	"
	4/1/2002	16:50	52	45	610	"
	4/2/2002	11:40	56	48	542	"
2-VEW-10A	11/27/2001	13:00	20	30	1,400	Well Closed 11/28/01-1/2/02
	1/3/2002	15:00	20	22	45	Well Opened
	1/10/2002	15:00	NA	2.3	NA	
	1/18/2002	18:00	33	48	2,750	"
	1/24/2002	15:10	45	45	1,890	"
	1/31/2002	15:48	18	28	1,450	"
	2/1/2002	10:00	13	20	1,350	"
	2/6/2002	13:00	11	17	1,250	Well Closed
	2/15/2002	11:00	12.5	19	1,085	Well Opened
	3/20/2002	14:00	NA	57	38	"
	3/29/2002	14:20	13	22	15	"
	3/30/2002	10:58	13	24	23	"
	3/31/2002	10:31	13	24	30	"
	4/1/2002	16:50	13.6	24	49	"
	4/2/2002	11:40	10	23	60	"

TABLE 6 - BUILDING 2 SVE SYSTEM WELLFIELD DATA

Site Name: BRC Former C-6 Facility
Location: Torrance, California
System: Building 2 SVE system

WELL ID	DATE	TIME	FLOW RATE (1) (scfm)	VACUUM (inches of H2O)	WELLHEAD PID (2) (ppmv)	COMMENTS
2-VEW-10B	11/27/2001	13:00	45	30	1,620	Well Closed 11/28/01-1/2/02
	1/3/2002	15:00	32	18	700	Well Opened
	1/10/2002	15:00	NA	4.2	NA	Well Closed
	1/18/2002	18:00	NA	4.4	NA	"
	1/24/2002	15:10	NA	4	NA	"
	1/31/2002	15:48	26	28	6,000	Well Opened
	2/1/2002	10:00	15	21	3,710	"
	2/6/2002	13:00	11	17	3,000	"
	2/15/2002	11:00	14	19	2,580	"
	2/27/2002	10:30	43	37	1,400	"
	3/6/2002	9:00	39	35	1,080	"
	3/13/2002	14:35	39	32	788	"
	3/20/2002	10:45	49	29	690	"
	3/29/2002	10:00	36	29	488	"
	3/29/2002	14:20	15	25	350	"
	3/30/2002	10:58	15	27	533	"
	3/31/2002	10:31	16	28	670	"
	4/1/2002	16:50	15	28	690	"
	4/2/2002	11:40	11	27	287	"
2-VEW-11A	11/27/2001	13:00	27	25	1,700	Well Closed 11/28/01-1/2/02
	1/3/2002	15:00	20	21	110	Well Opened
	1/10/2002	15:00	NA	22	725	"
	1/18/2002	18:00	52	47	620	"
	1/24/2002	15:10	79	43	350	"
	1/31/2002	15:48	39	29	280	"
	2/1/2002	10:00	28	20	175	"
	2/6/2002	13:00	24	16	100	"
	2/15/2002	11:00	27	19	90	Well Closed
	3/20/2002	14:00	NA	46	20	"
	3/29/2002	14:20	24	8	NA	Well Opened
	3/30/2002	10:58	1	9	NA	"
	3/31/2002	10:31	0.4	10	NA	"
	4/1/2002	16:50	NA	9	NA	"
	4/2/2002	11:40	NA	10	NA	"
2-VEW-11B	11/27/2001	13:00	19	30.0	1,040	Initial Startup
	11/28/2001	13:15	NA	27.5	3,100	Well Opened
	11/30/2001	14:20	NA	27.0	NA	"
	12/3/2001	17:10	NA	26.5	NA	"
	12/4/2001	10:15	NA	27.5	1,510	"
	12/5/2001	16:30	NA	29.0	3,200	"
	12/6/2001	8:30	NA	28.8	3,015	"
	12/7/2001	7:30	NA	29.0	3,600	"
	12/8/2001	16:00	NA	29.0	3,100	"
	12/9/2001	13:00	NA	27.0	NA	"
	12/10/2001	16:00	NA	28.5	4,700	"
	12/11/2001	11:00	NA	30.0	4,100	Well Closed
	12/12/2001	19:15	NA	2.1	NA	"
	12/13/2001	11:15	NA	0.9	NA	"
	12/20/2001	15:10	NA	1.7	NA	"
	12/28/2001	11:00	15	22.0	520	Well Opened
	1/3/2002	15:00	15	22.0	520	"
	1/10/2002	15:00	NA	4.0	NA	"
	1/18/2002	18:00	NA	4.8	NA	"
	1/24/2002	15:10	NA	4.5	NA	"
	1/31/2002	15:48	12	29.0	850	"
	2/1/2002	10:00	6	21.0	590	"
	2/6/2002	13:00	5	16.0	340	"
	2/15/2002	11:00	5.5	19	415	Well Closed
	3/20/2002	14:00	NA	53	303	"
	3/29/2002	14:20	18	39	586	Well Opened
	3/30/2002	10:58	16	41	531	"
	3/31/2002	10:31	17.5	42	1,651	"
	4/1/2002	16:50	17	41	565	"
	4/2/2002	11:40	17	44	515	"

TABLE 6 - BUILDING 2 SVE SYSTEM WELLFIELD DATA

Site Name: BRC Former C-6 Facility
Location: Torrance, California
System: Building 2 SVE system

WELL ID	DATE	TIME	FLOW RATE (1) (scfm)	VACUUM (inches of H2O)	WELLHEAD PID (2) (ppmv)	COMMENTS
2-VEW-12	11/27/2001	13:00	82	30	2,500	Well Closed 11/28/01-1/2/02
	1/3/2002	15:00	75	19	390	Well Opened
	1/10/2002	15:00	NA	3.4	NA	Well Closed
	1/18/2002	18:00	NA	5.5	NA	"
	1/24/2002	15:10	NA	4.8	NA	"
	1/31/2002	15:48	75	28	815	Well Opened
	2/1/2002	10:00	49	20	540	"
	2/6/2002	13:00	39	17	325	"
	2/15/2002	11:00	44	19	350	Well Closed
	3/20/2002	14:00	NA	40	61	"
	3/29/2002	14:20	117	41	67	Well Opened
	3/30/2002	10:58	120	42	92	"
	3/31/2002	10:31	121	43	539	"
	4/1/2002	16:50	121	43	154	"
	4/2/2002	11:40	125	45	145	"
2-VEW-13A	11/27/2001	13:00	17	25	1,700	Well Closed 11/28/01-1/2/02
	1/3/2002	15:00	10	23	95	Well Opened
	1/10/2002	15:00	12	32	380	"
	1/18/2002	18:00	22	48	375	"
	1/24/2002	15:10	45	44	420	"
	1/31/2002	15:48	23	29	500	"
	2/1/2002	10:00	18	20	390	"
	2/6/2002	13:00	16	17	375	"
	2/15/2002	11:00	15	19	189	Well Closed
	3/20/2002	14:00	NA	47	161	"
	3/29/2002	14:20	1	6.5	NA	Well Opened
	3/30/2002	10:58	0.3	7.5	NA	"
	3/31/2002	10:31	0.7	8	NA	"
	4/1/2002	16:50	NA	9	NA	"
	4/2/2002	11:40	NA	10	NA	"
2-VEW-13B	11/27/2001	13:00	40	25	1,850	Well Closed 11/28/01-1/2/02
	1/3/2002	15:00	35	21	990	Well Opened
	1/10/2002	15:00	NA	5	NA	"
	1/18/2002	18:00	NA	4.7	NA	"
	1/24/2002	15:10	NA	5.1	NA	"
	1/31/2002	15:48	22	29	3,550	"
	2/1/2002	10:00	12	20	2,500	"
	2/6/2002	13:00	12	17	1,900	"
	2/15/2002	11:00	9.6	19	1,590	Well Closed
	3/20/2002	14:00	NA	53	303	"
	3/29/2002	14:20	6	24.5	170	Well Opened
	3/30/2002	10:58	8	26	289	"
	3/31/2002	10:31	5.6	26	327	"
	4/1/2002	16:50	5.8	27	291	"
	4/2/2002	11:40	7.6	30	621	"
2-VEW-14A	11/27/2001	13:00	18	25	1,300	Well Closed 11/28/01-1/2/02
	1/3/2002	15:00	19	23	390	Well Opened
	1/10/2002	15:00	NA	22	700	"
	1/18/2002	18:00	40	48	520	"
	1/24/2002	15:10	75	42	415	"
	1/31/2002	15:48	52	28	140	"
	2/1/2002	10:00	43	20	140	"
	2/6/2002	13:00	44	17	102	"
	2/15/2002	11:00	46	18	50	Well Closed
	3/20/2002	14:00	NA	42	58	"
	3/29/2002	14:20	18	44	NA	Well Opened
	3/30/2002	10:58	0.3	6	NA	"
	3/31/2002	10:31	0.1	7	NA	"
	4/1/2002	16:50	NA	7	NA	"
	4/2/2002	11:40	NA	8	NA	"

TABLE 6 - BUILDING 2 SVE SYSTEM WELLFIELD DATA

Site Name: BRC Former C-6 Facility
Location: Torrance, California
System: Building 2 SVE system

WELL ID	DATE	TIME	FLOW RATE (1) (scfm)	VACUUM (inches of H2O)	WELLHEAD PID (2) (ppmv)	COMMENTS
2-VEW-14B	11/27/2001	13:00	33	25.0	1,750	Initial Startup
	11/28/2001	13:15	NA	27.5	3,000	Well Opened
	11/30/2001	14:20	NA	27.0	NA	"
	12/3/2001	17:10	NA	26.0	NA	"
	12/4/2001	10:15	NA	28.0	960	"
	12/5/2001	16:30	NA	28.0	2,400	"
	12/6/2001	8:30	NA	28.2	2,930	"
	12/7/2001	7:30	NA	29.5	3,875	"
	12/8/2001	16:00	NA	29.0	2,650	"
	12/9/2001	13:00	NA	24.0	NA	"
	12/10/2001	16:00	NA	28.0	4,075	"
	12/11/2001	11:00	NA	30.0	3,850	Well Closed
	12/12/2001	19:15	NA	1.9	NA	"
	12/13/2001	11:15	NA	0.8	NA	"
	12/20/2001	15:10	NA	1.6	NA	"
	12/28/2001	11:00	40	21.0	830	Well Opened
	1/3/2002	15:00	40	21.0	830	"
	1/10/2002	15:00	NA	4.2	NA	"
	1/18/2002	18:00	NA	5.9	NA	"
	1/24/2002	15:10	NA	5.2	NA	"
	1/31/2002	15:48	21	28.0	1,015	"
	2/1/2002	10:00	16	20.0	765	"
	2/6/2002	13:00	NA	17.0	600	"
	2/15/2002	11:00	13	18	520	Well Closed
	3/20/2002	14:00	NA	47	79	"
	3/29/2002	14:20	24.5	27	163	Well Opened
	3/30/2002	10:58	16.7	28.5	94	"
	3/31/2002	10:31	17	29	191	"
	4/1/2002	16:50	16	29	208	"
	4/2/2002	11:40	16	30	190	"
2-VEW-15A	11/27/2001	13:00	41	30	1,170	Well Closed 11/28/01-1/2/02
	1/3/2002	15:00	23	18	67	Well Opened
	1/10/2002	15:00	NA	1.9	NA	"
	1/18/2002	18:00	61	47	810	"
	1/24/2002	15:10	83	43	585	"
	1/31/2002	15:48	37	28	500	"
	2/1/2002	10:00	27	20	300	"
	2/6/2002	13:00	23	16	290	"
	2/15/2002	11:00	29	18	150	Well Closed
	3/29/2002	14:20	1	5	NA	Well Opened
	3/30/2002	10:58	0.5	6	NA	"
	3/31/2002	10:31	4	6	NA	"
	4/1/2002	16:50	NA	7	NA	"
	4/2/2002	11:40	NA	8	NA	"
2-VEW-15B	11/27/2001	13:00	22	25	1,120	Well Closed 11/28/01-1/2/02
	1/3/2002	15:00	20	21	575	Well Opened
	1/10/2002	15:00	23	22	2,100	"
	1/18/2002	18:00	61	47	810	"
	1/24/2002	15:10	NA	5.1	NA	"
	1/31/2002	15:48	10	28	1,400	"
	2/1/2002	10:00	7	21	925	"
	2/6/2002	13:00	6	16	765	"
	2/15/2002	11:00	6	18	665	Well Closed
	3/20/2002	14:00	NA	51	113	"
	3/29/2002	14:20	19	39	300	Well Opened
	3/30/2002	10:58	18	41	414	"
	3/31/2002	10:31	18	41	412	"
	4/1/2002	16:50	16	29	208	"
	4/2/2002	11:40	18	44	360	"

Notes:
ppmv: parts per million by volume
scfm: standard cubic foot per minute (acfm corrected for vacuum and temperature)
NA: data was not recorded or available
(1) Direct flow readings taken by hand-held TSI Veloci-calc Plus
(2) Measurements taken with a MiniRae 2000 PID calibrated to 100 ppmv Hexane, results as Hexane.